

Possibility of Dermatitis from Some Disinfectants

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Skin tests on guinea pigs were carried out with four compounds following the standard technique used for testing whether a given compound will produce contact or sensitization dermatitis.

The skin effects of a new "Corosan" containing ethyl mercury-p-toluene sulfonamide were compared to those of the old "Corosan" containing diethyl mercury phosphate.

Both compounds were applied as a 10% suspension in 95% ethyl alcohol and both produced skin irritation in all guinea pigs as evidenced by redness of the skin with slight edema. Guinea pigs which had been injected with ethyl mercury-p-toluene sulfonamide showed a maximum reaction 24 hours after removal of the final patches while the diethyl mercury phosphate reactions were at a maximum when the patches were removed. It was not possible to demonstrate the presence or absence of sensitization due to the high degree of contact irritation produced by the compounds. Minor degrees of erythema were also difficult to estimate due to the red color of the compounds.

The new "Corosan" apparently is not an improvement over the old "Corosan" as far as its irritant effect on the skin is concerned.

The skin effects of "Arasan" (tetramethyl thiuron disulfide) and Sporgon (tetrachloro P-benzoquinone) were tested. A 1% and a 5% suspension of each compound in 50% ethyl alcohol were used in these tests. Neither compound gave rise to contact or sensitization dermatitis in guinea pigs.

It will be safe to test the latter two compounds further on human beings if such tests are desired. The first two compounds appear to be too irritant to carry out skin tests on humans with any degree of safety.

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